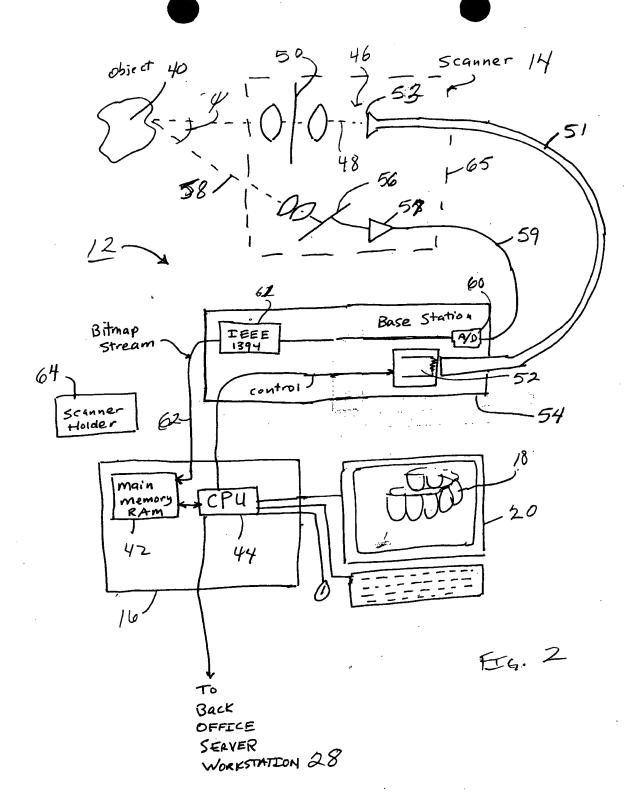
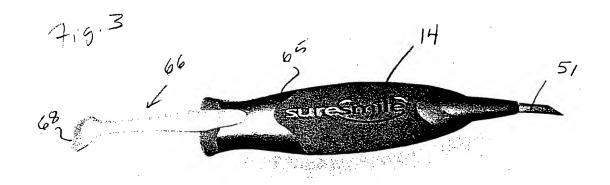
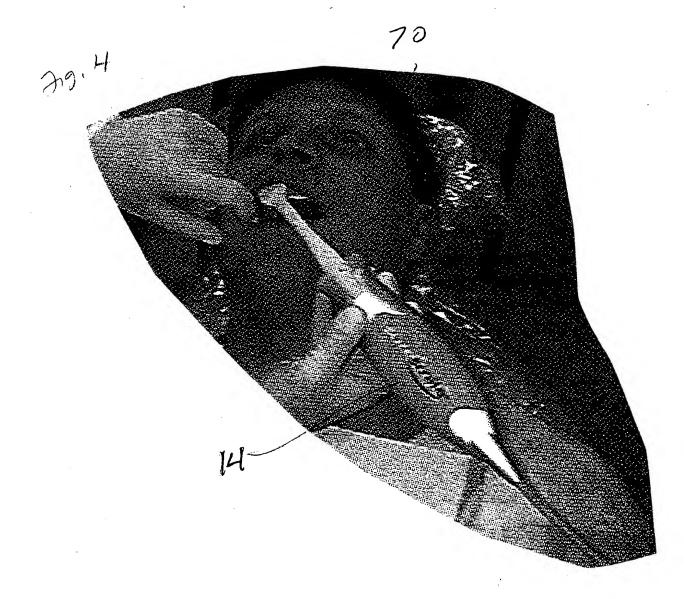


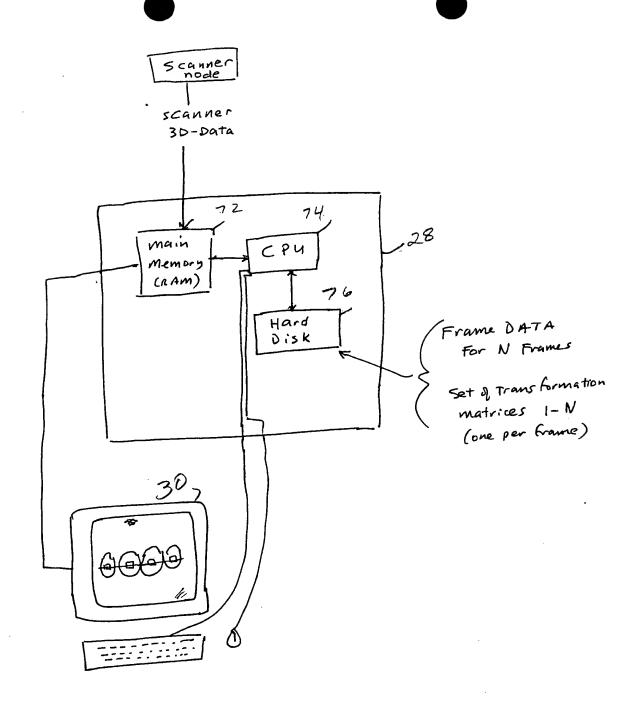
Fig. 1





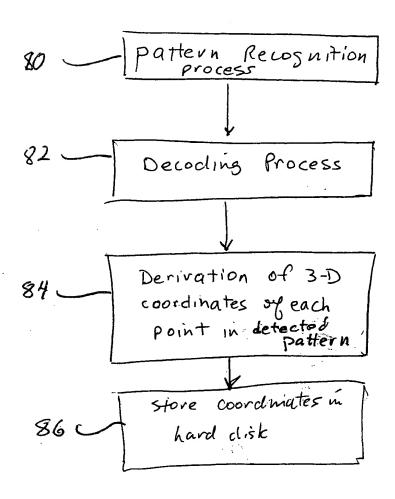


\

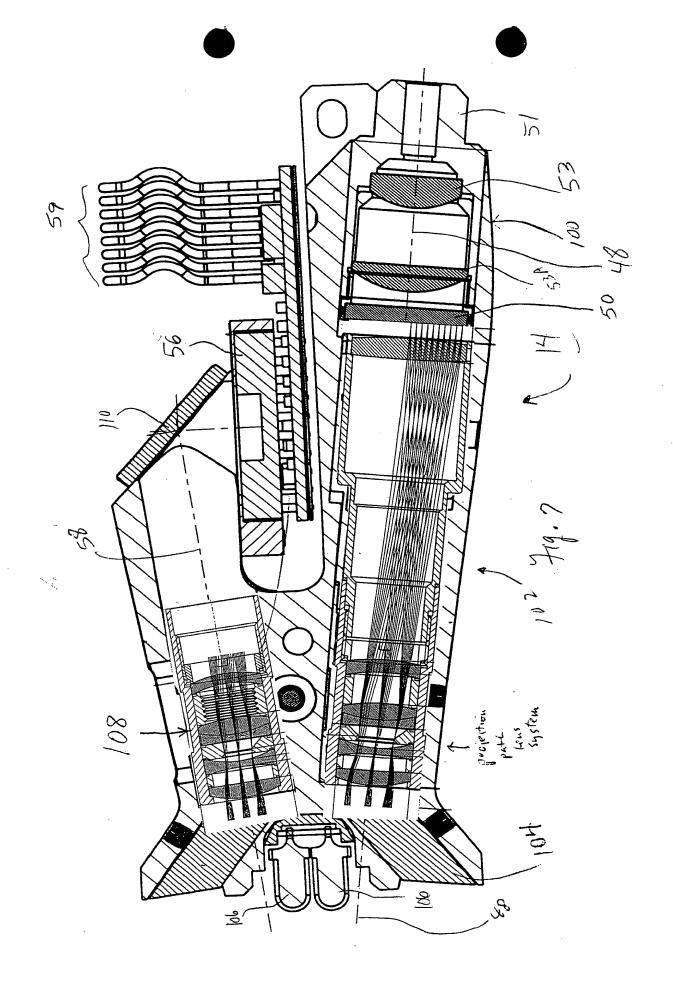


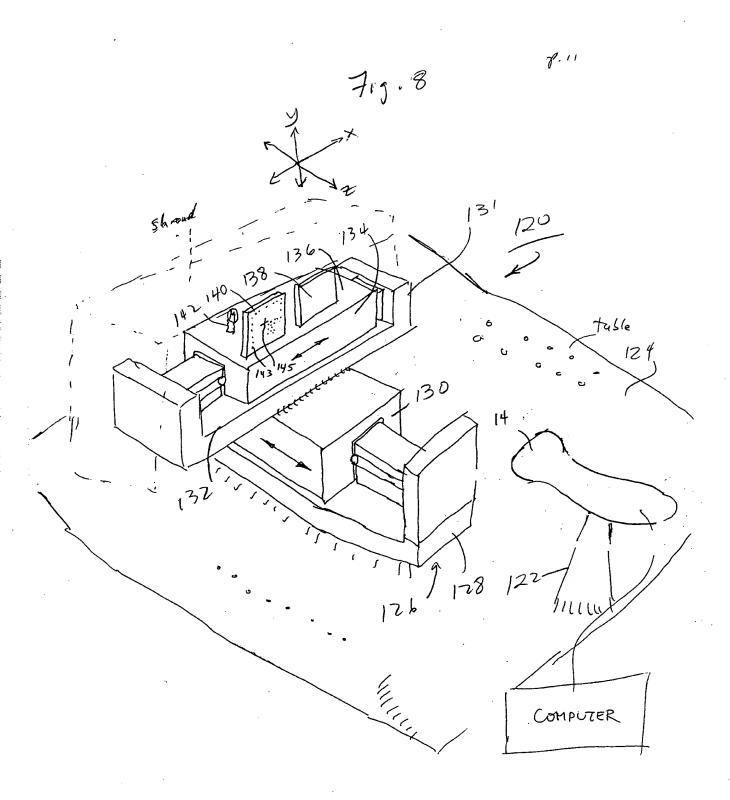
4ig. 5

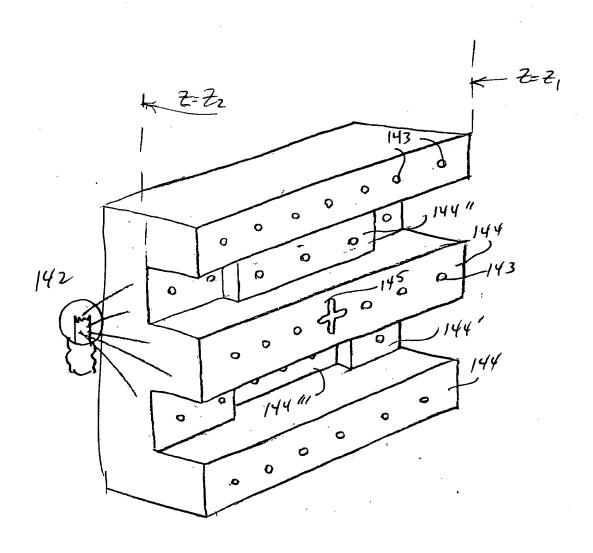
3-Dimensional Image capture (per frame)



719.6







7.j. 8A

719.9

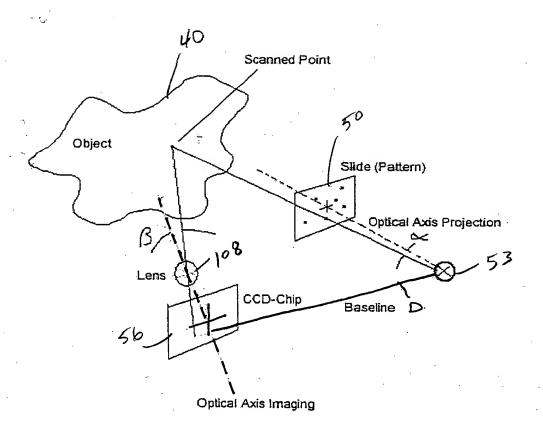
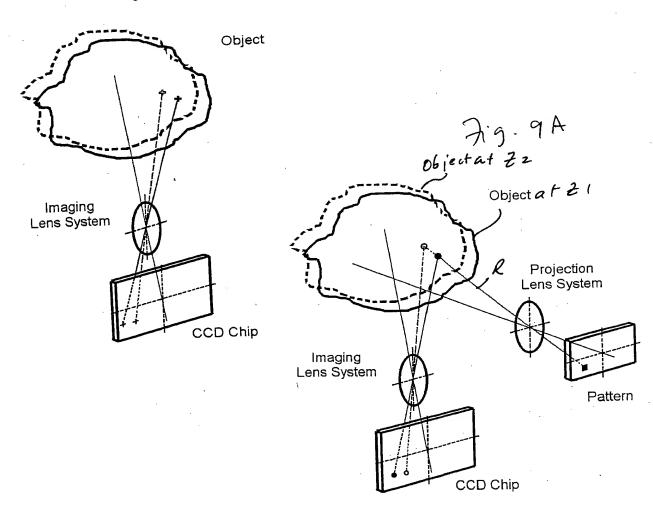
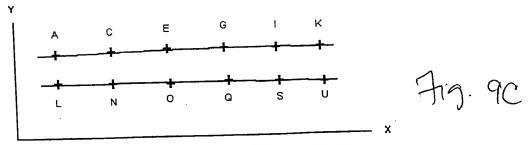
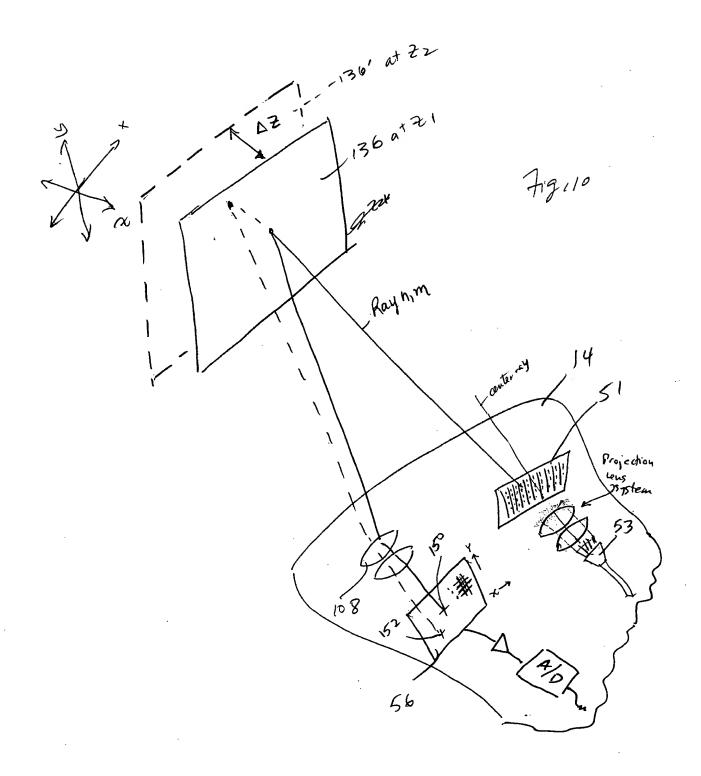


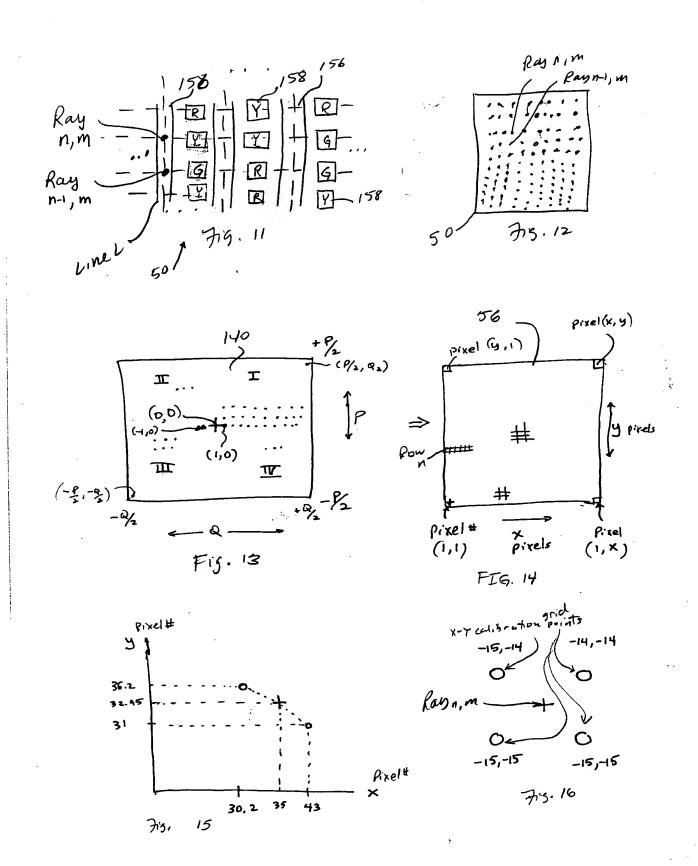
Fig. 9B

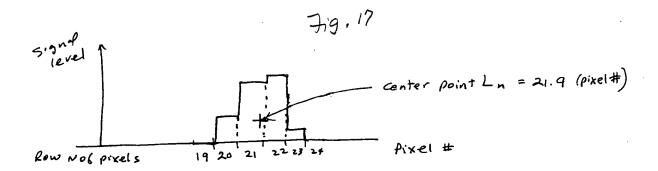


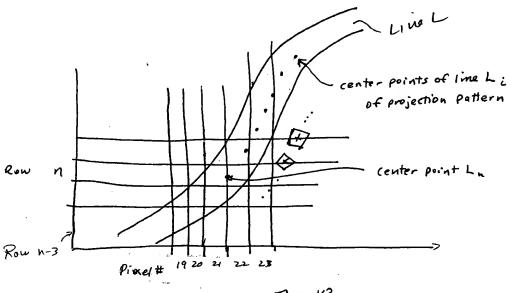


Pixel coordinates for portions of the pattern assigned to a certain Z-level

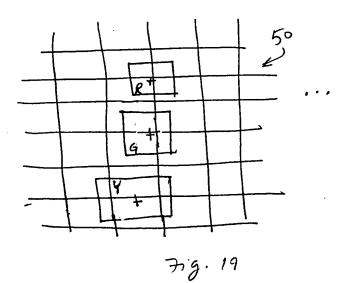


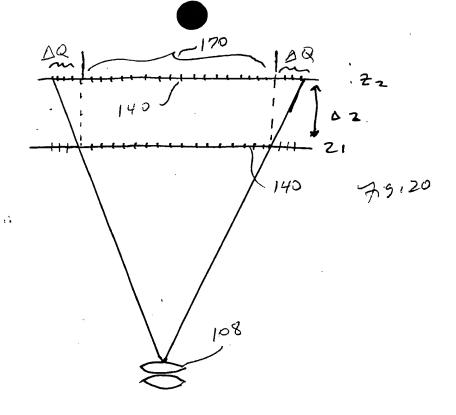


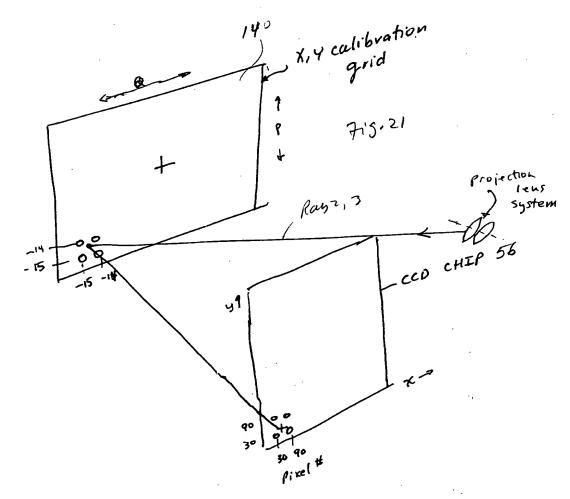




715.18







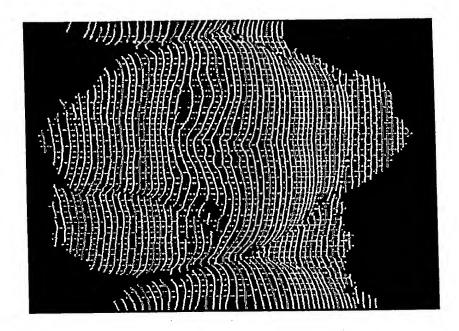
object at unknown clistene 162

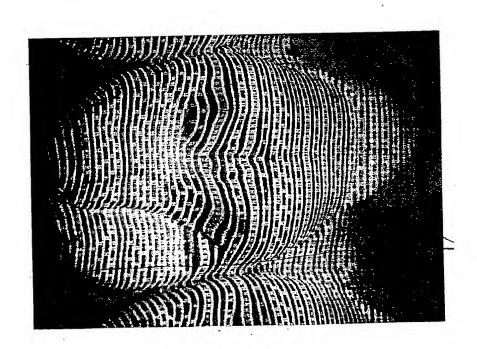
2, < \(\frac{\pi}{2}\) 2 | \(\frac{\pi}{2}\) | Ray n, m at \(\frac{2}{2}\) | \(\frac{\pi}{2}\) | Ray n, m reflected from object lies alons line at \(\frac{\pi}{2}\) | Ray n, m \(\frac{\pi}{2}\) | Ray n, m

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insubpixel resolution	ration	ч	Pows	29.5		21.6				21.8			
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×		Ļ	Row 2	1.1		20.4		4.5		21.5			
a >)			Rowl	1.0		101	- a	3.9		12.1			
				9,2,2 X	yn m Distance	CCDY	m m Distana	-			£	Dist.	
					Hi	· ·			H	1			

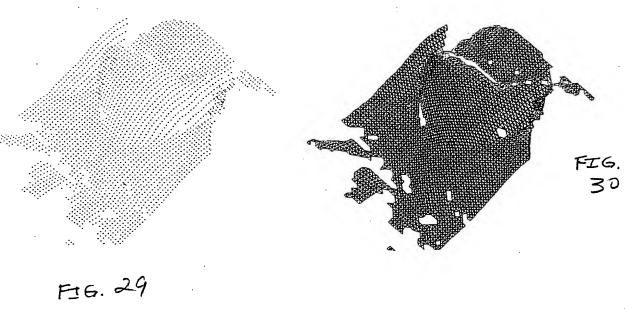
- , ,	(%, %)	1,279,5	1.279.4	1256.4	1251,5		(-%, k)		
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Quadrant 1	(0,0) (1,0) (2,0) (3,0) (4,200,0) (42,0) (0,1) (1,1) (2,1)	64011 700,2 7606 820,5	6401 640.1 640.3 640.4	640.2 680.3 THI.Z 801.6	CCD y 640.2 640.3 640.1 640.1		(-1,0) (-3,0) (-3,0) (-4,0	(-1)-(-2,-1)	(0,1) (1,1)
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ч	Calibration Table #	•	Row 3	30.2	-14.6	36.2	7:71	43.0	-14.8	31.0	-15.8							
soluti	45 isu	ч	Rowz	29.5		21.6,		4:1		21.8				-			_	
, in subpixel resolution	a (i bn	Line	Rowl	27.1		11.5		34.0	<u> </u>	13.2							_	
subp!>) <u></u>	ROWM	:	3 mm = 41 3	1111		<u></u>										
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ccox, ccoy = pixel		19.		1.5		32.8		8.9		30.4			.	<u></u> -		•		
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7.9.2



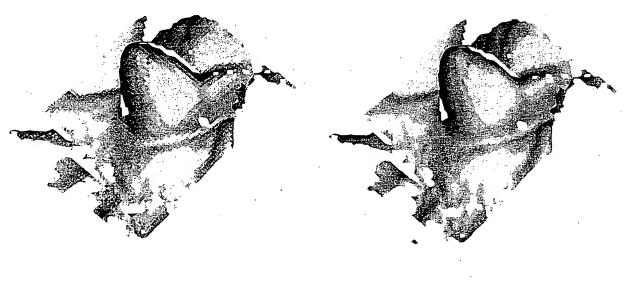
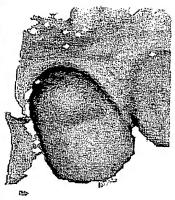


FIG. 31

FIC7. 32







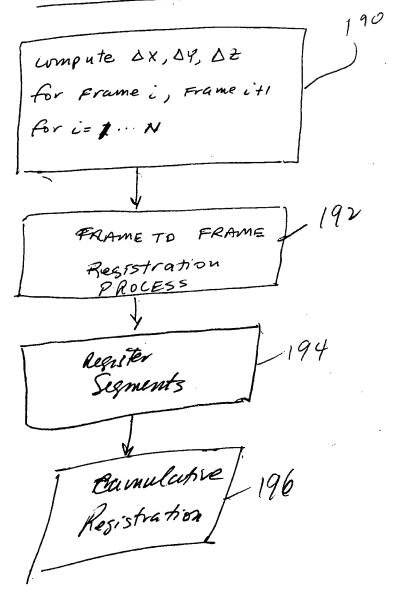
FI6. 35

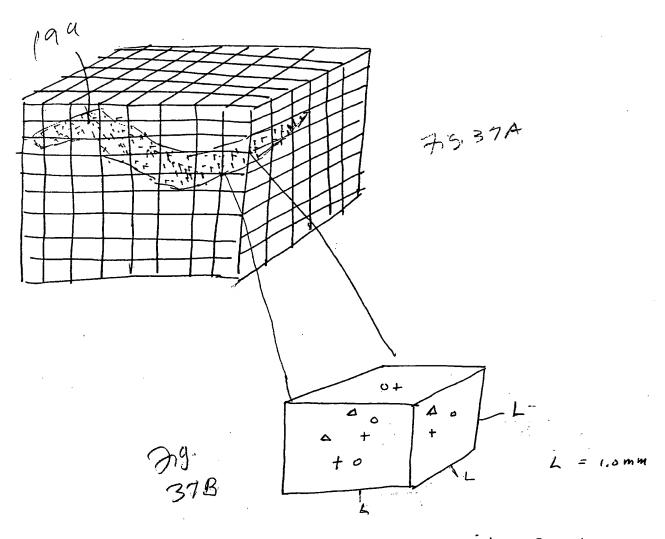
FIG. 33

F56. 34

Jng.36

Resistration

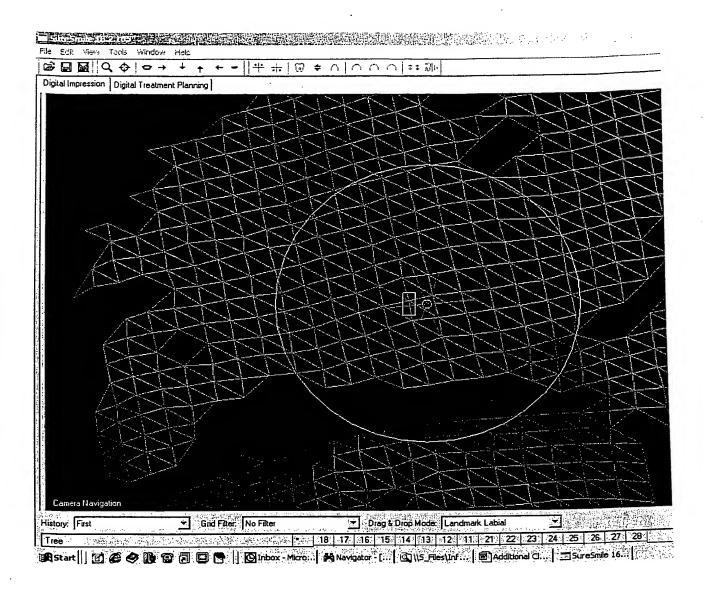




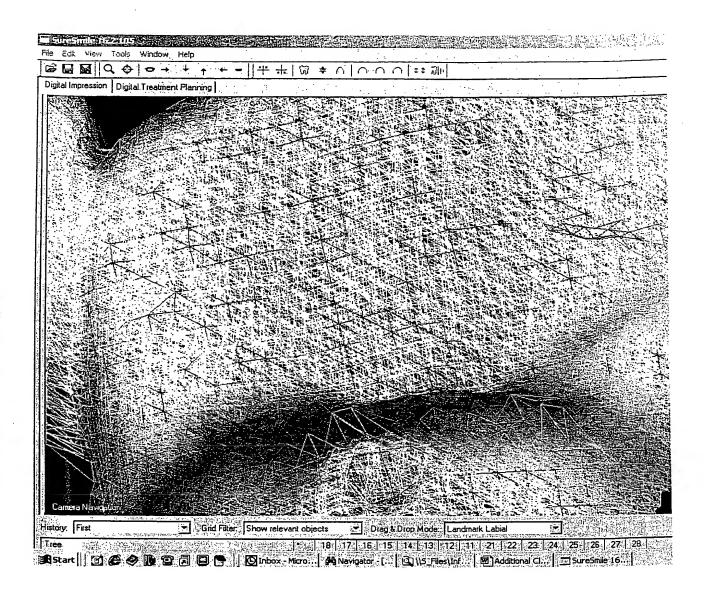
A = points of frame i+1

o = points of frame i+1

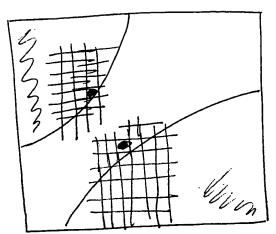
o = points of frame i+2



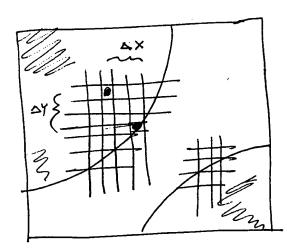
Foure 37c



75-37 D

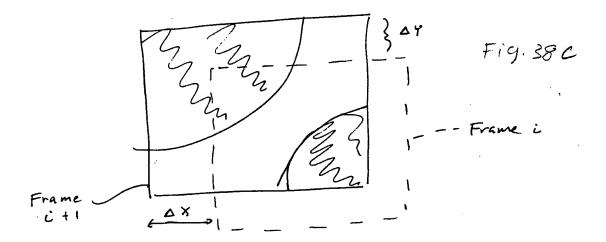


Frame i 75.

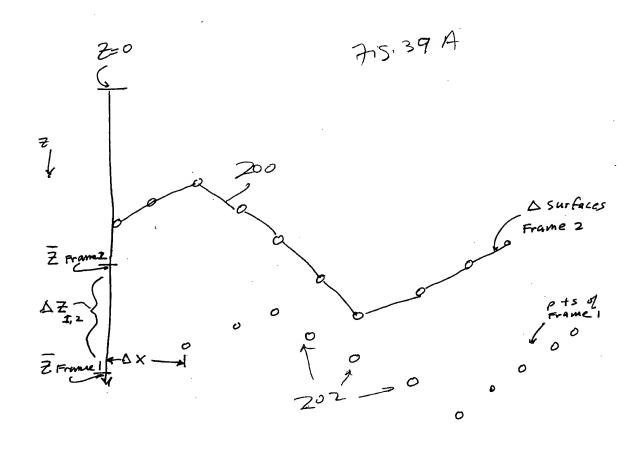


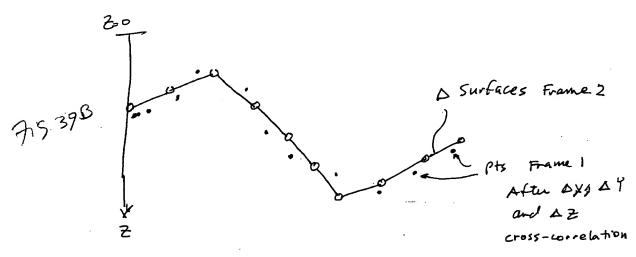
A). 38B

Frame i+1



(





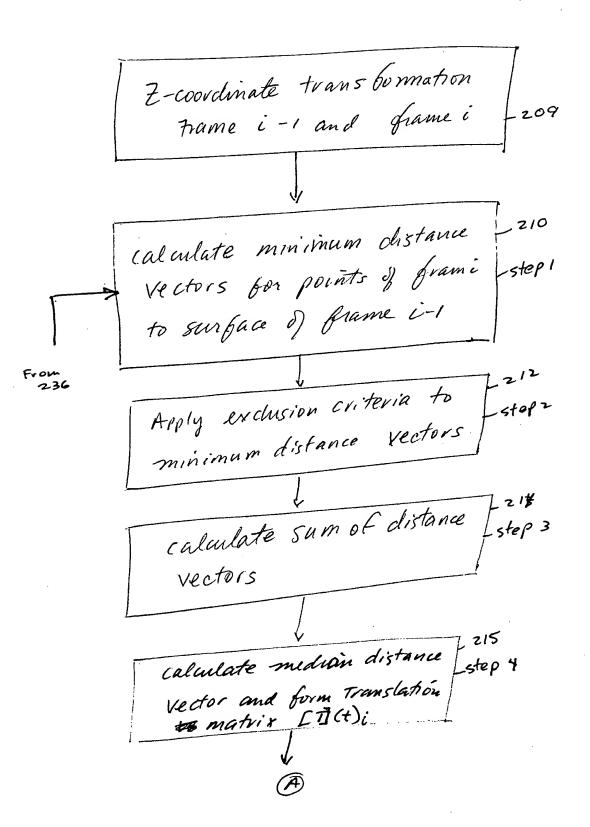
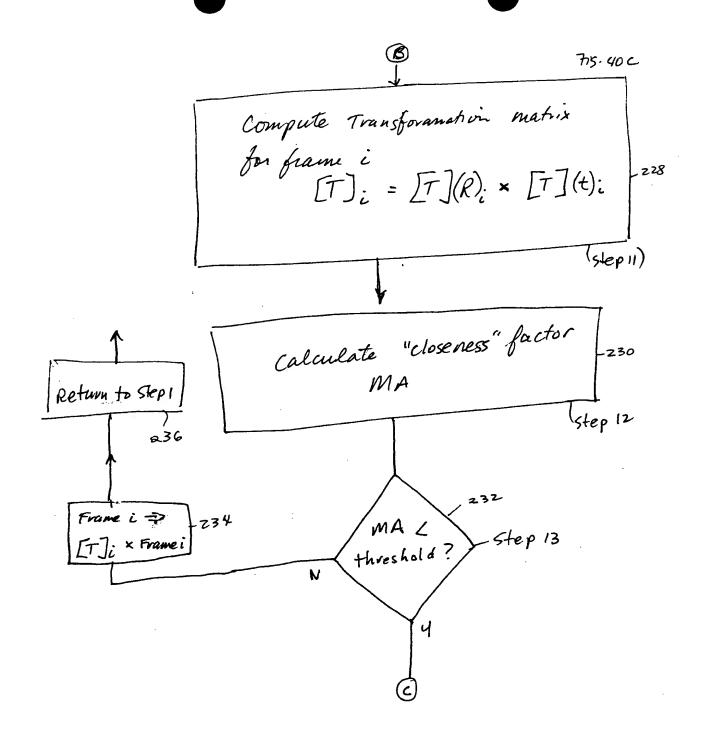
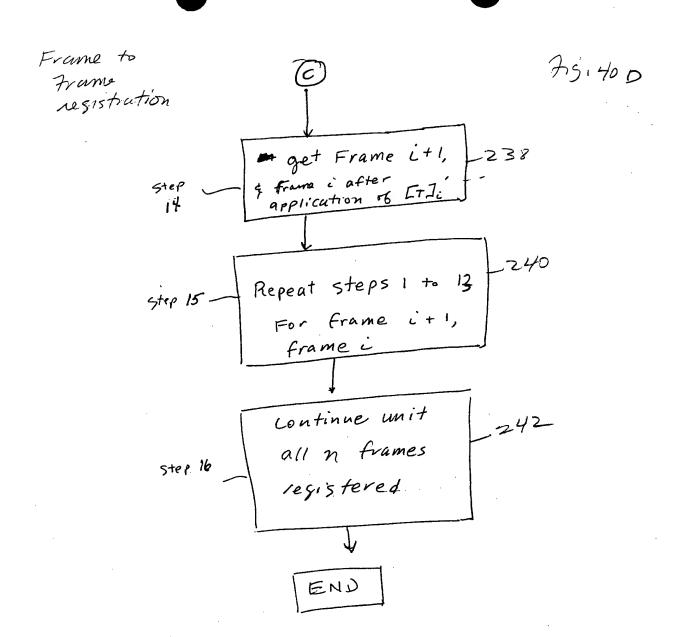
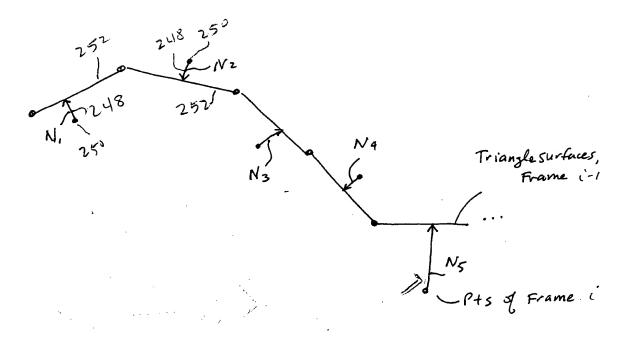


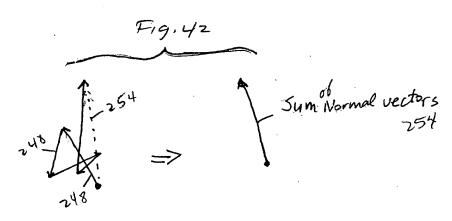
FIG. 40 B
Subtract median distance vector from step 5 every point in grame i 216
the of position
vector and minimum distance steps vectors for all points in fram i 218
Calculate sum of all cross-vectors step?
•
Weight sum of cross-vectors steps
Scale result with emperical step9
"accelleration factor" f. fray
set up rotation transformation step 10 matrix [T](R);
B

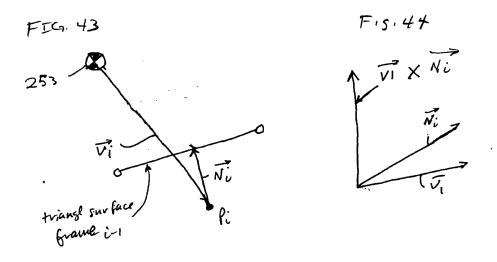




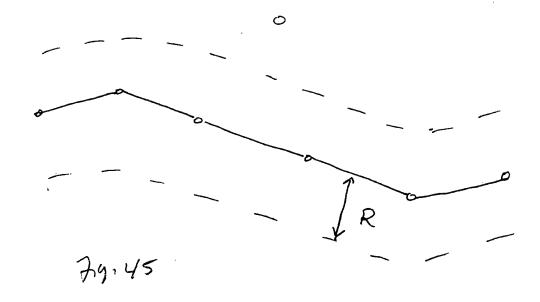
F13.41

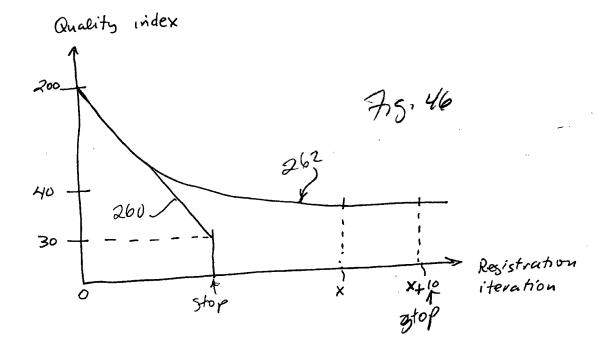


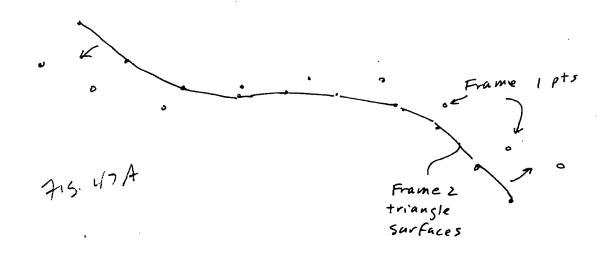


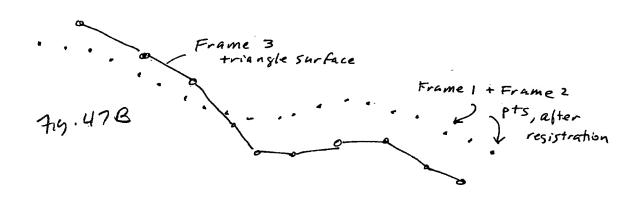


. ...

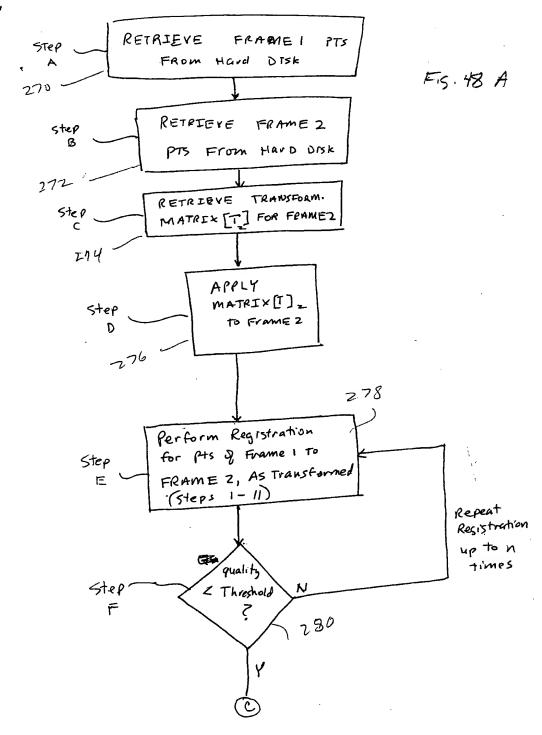


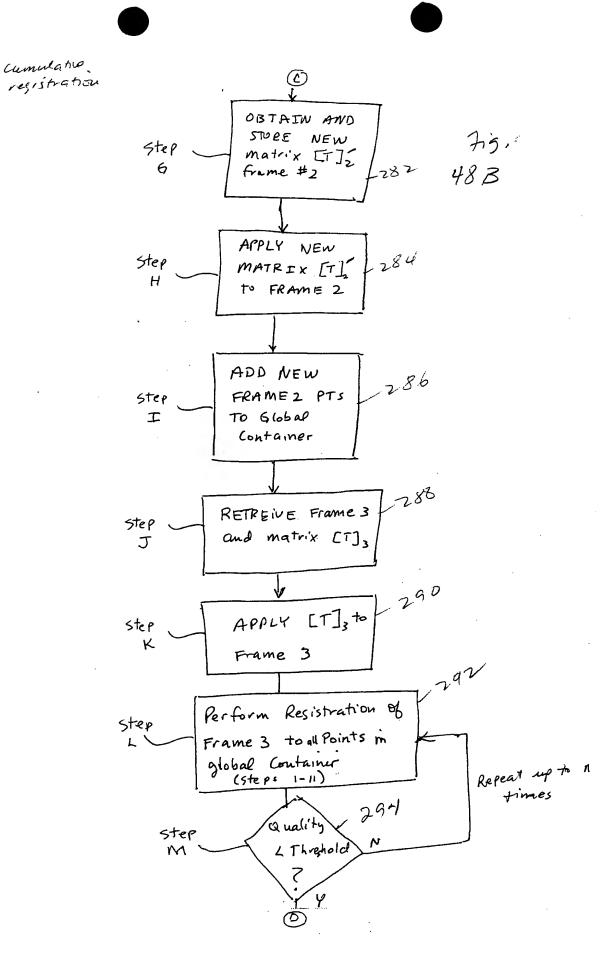


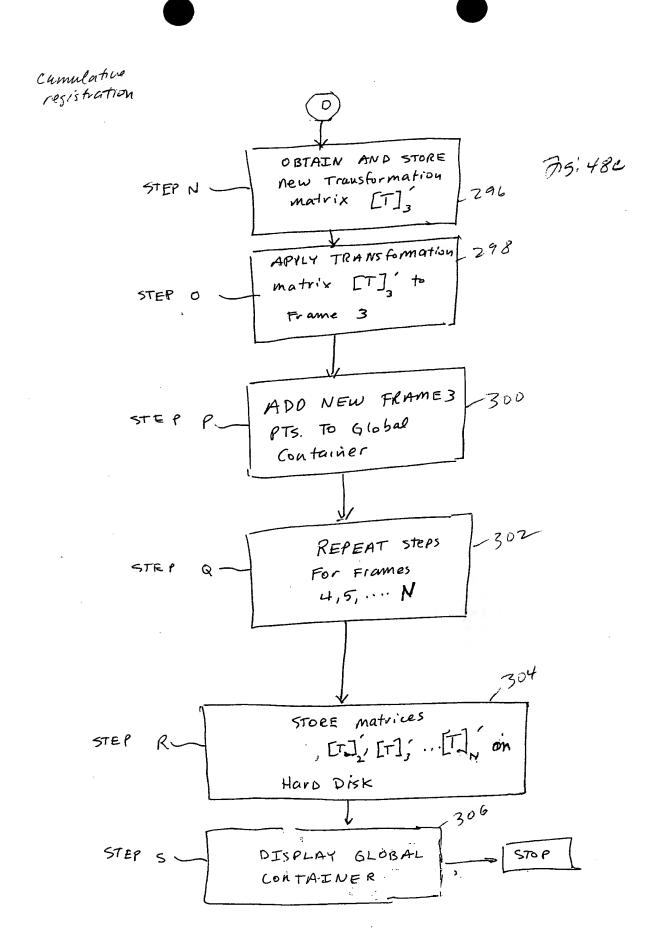


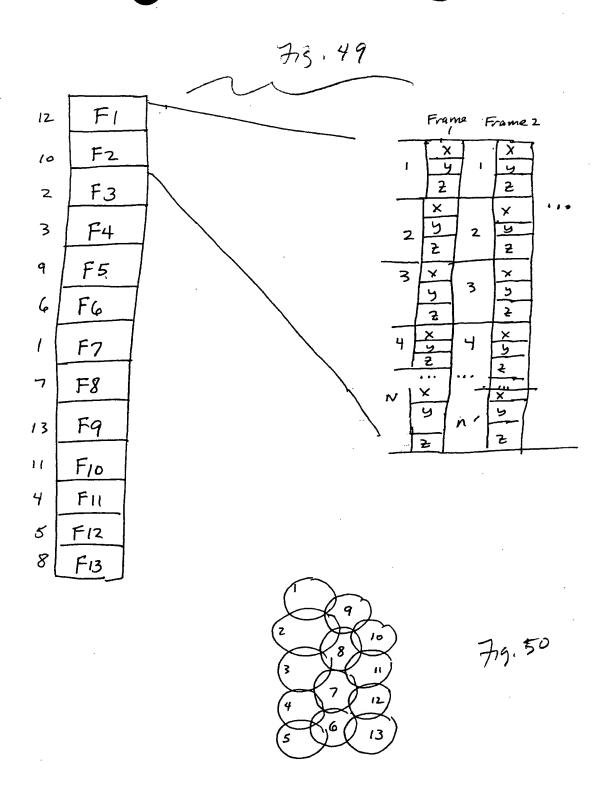


Cumulatice Resistration









cumutative

3-D model

update cumulative 3-0 model

update cumulatim model

> Iteration 2

iteration 3

resistr.

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			79, 53	3	
~	Frame 2 iteration 1 (uptate [T]2)	Frame 3 iteration ((update [T] ₃)	i t	rame N reventor l update[T]N)	

iteration z

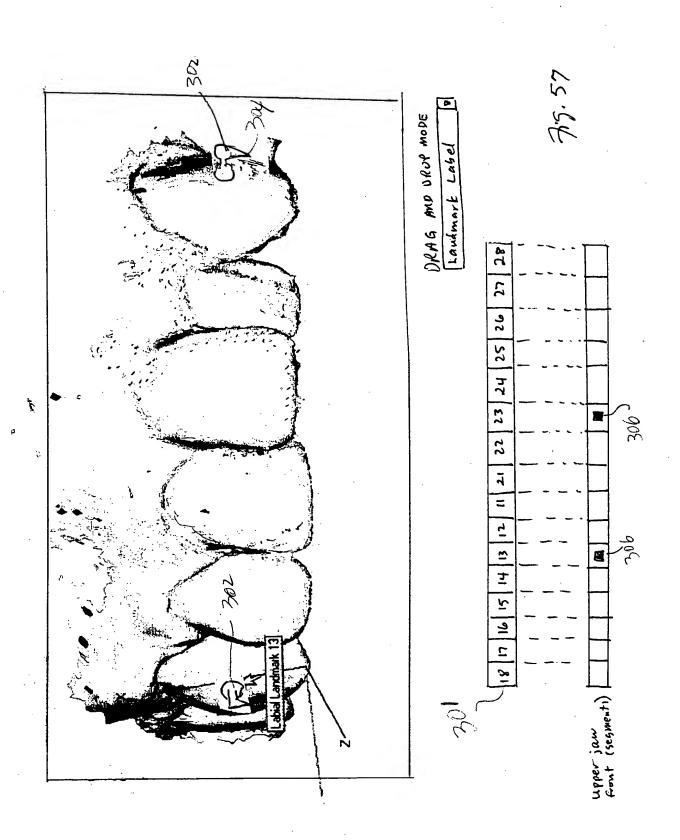
iteration 2

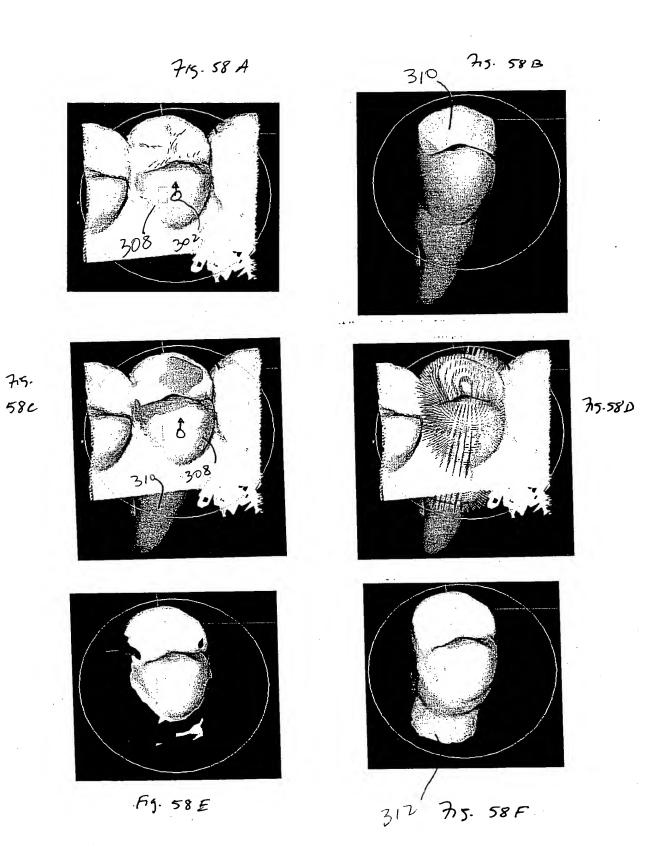
FIG. 54

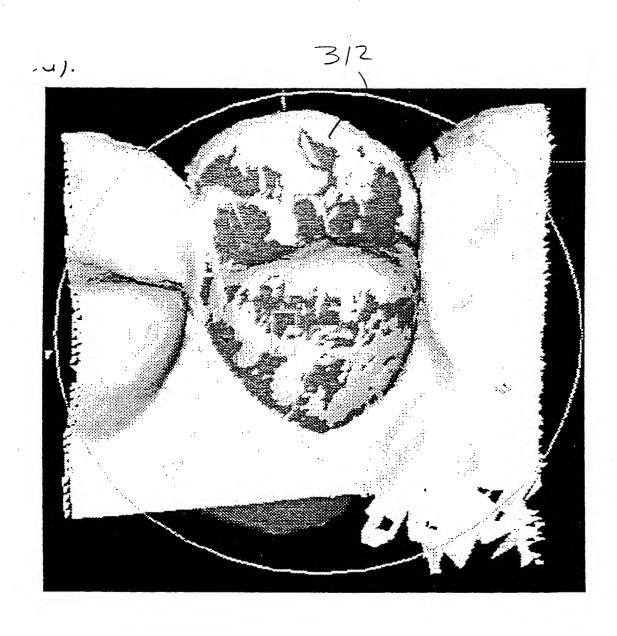
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ine] Jount Jount Jak gest Jak ge	Cell \$i28	langle pl osing ga adge len aps:
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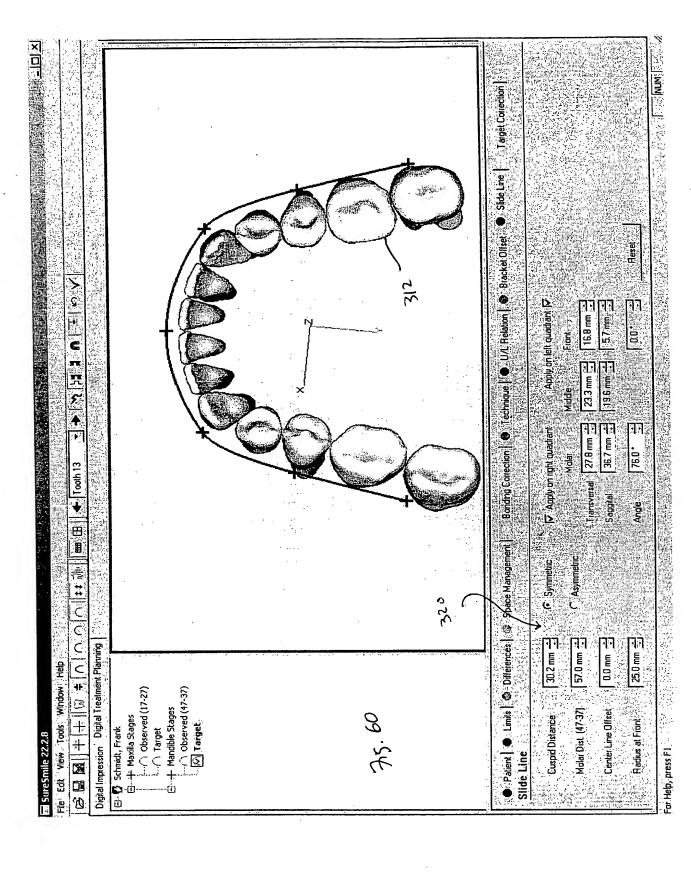
75.56			25 26 27 28 Date	01/18/01 14:08:47	01/18/01 14:08.47 01/18/01 14:08.47 01/18/01 13:11:40	
		Camera Mayrositon	Ulag & Diop Mode: Lengmark Lengla 16 15 14 10 12 11 21 22 24 2 A			
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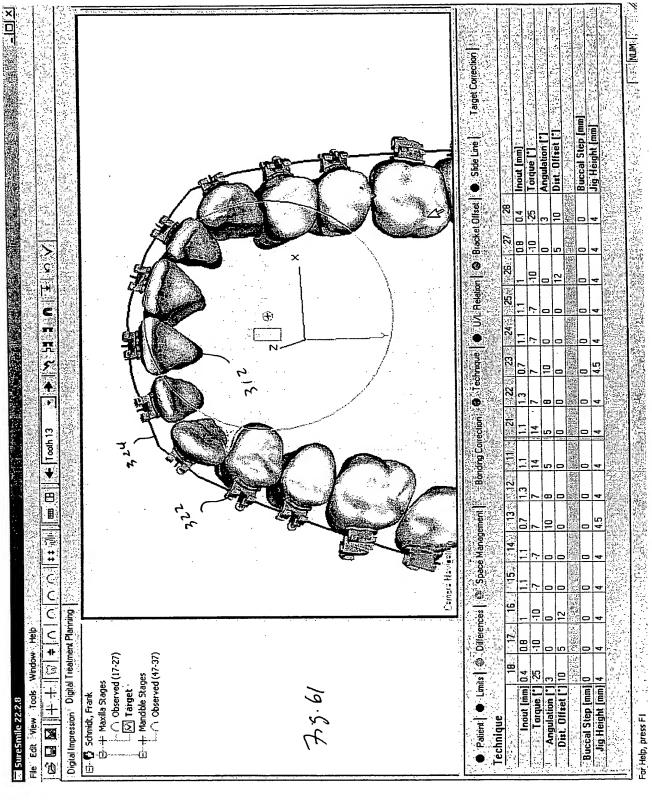




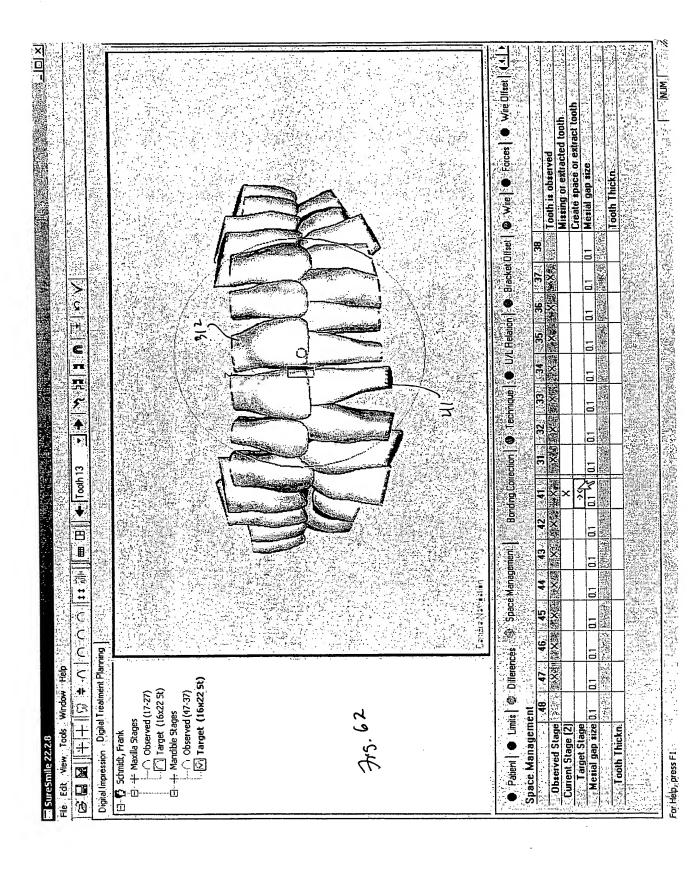


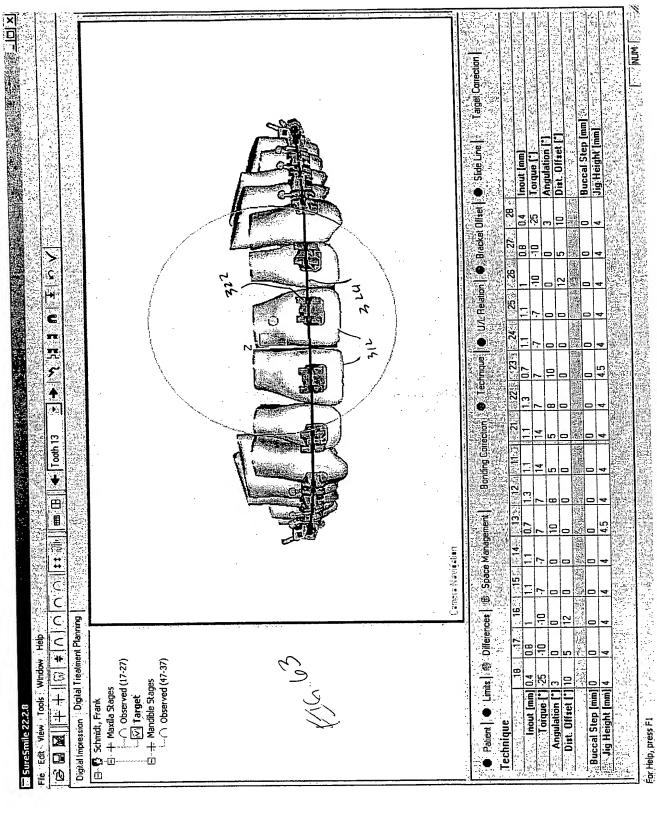
75. 59



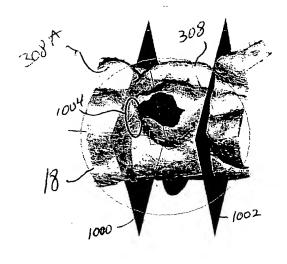


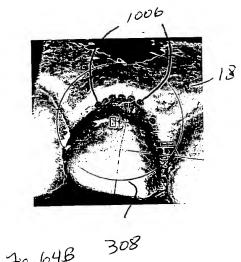
For Help, press F1



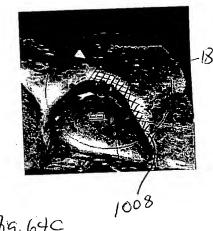


For Help, press F1

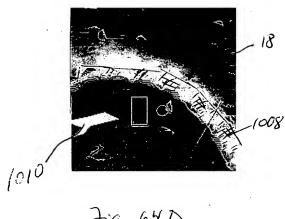




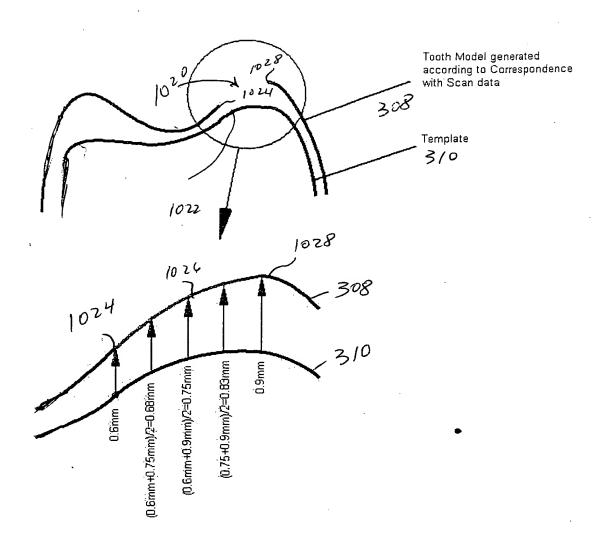
719.64B



79.640



7.9. 64D



Jis. 65